AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph traversing pages 18-19 as follows:

The transmission rate of the guard film and air gap is stored in the computer as CalC. The sample material is then sealed in the test cell. Again, water vapor diffuses through the air gap to the guard film and the test material and then mixes with a dry gas flow that sweeps the test material. Also, again, this mixture is carried to the vapor sensor. The computer then calculates the transmission rate of the combination of the air gap, the guard film, and the test material. This information is then used to calculate the transmission rate at which moisture is transmitted through the test material according to the equation:

$$TR^{-1}_{\text{test material}} = TR^{-1}_{\text{test material, guardfilm, airgap}} - TR^{-1}_{\text{guardfilm, airgap}}$$

Calculations:

WVTR: The calculation of the WVTR uses the formula:

$$WVTR = \sout{Fp_{sat}(T)RH/Ap_{sat}(T)(1-RH))} \quad \underline{F\rho_{sat}(T)RH/Ap_{sat}(T)(1-RH)}$$

where:

F = The flow of water vapor in cc/min.,

$\sout{p_{sat}(T)}$ $\underline{\rho_{sat}(T)}$ = The density of water in saturated air at temperature T,

RH = The relative humidity at specified locations in the cell,

A = The cross sectional area of the cell, and,

$p_{sat}(T)$ = The saturation vapor pressure of water vapor at temperature T.